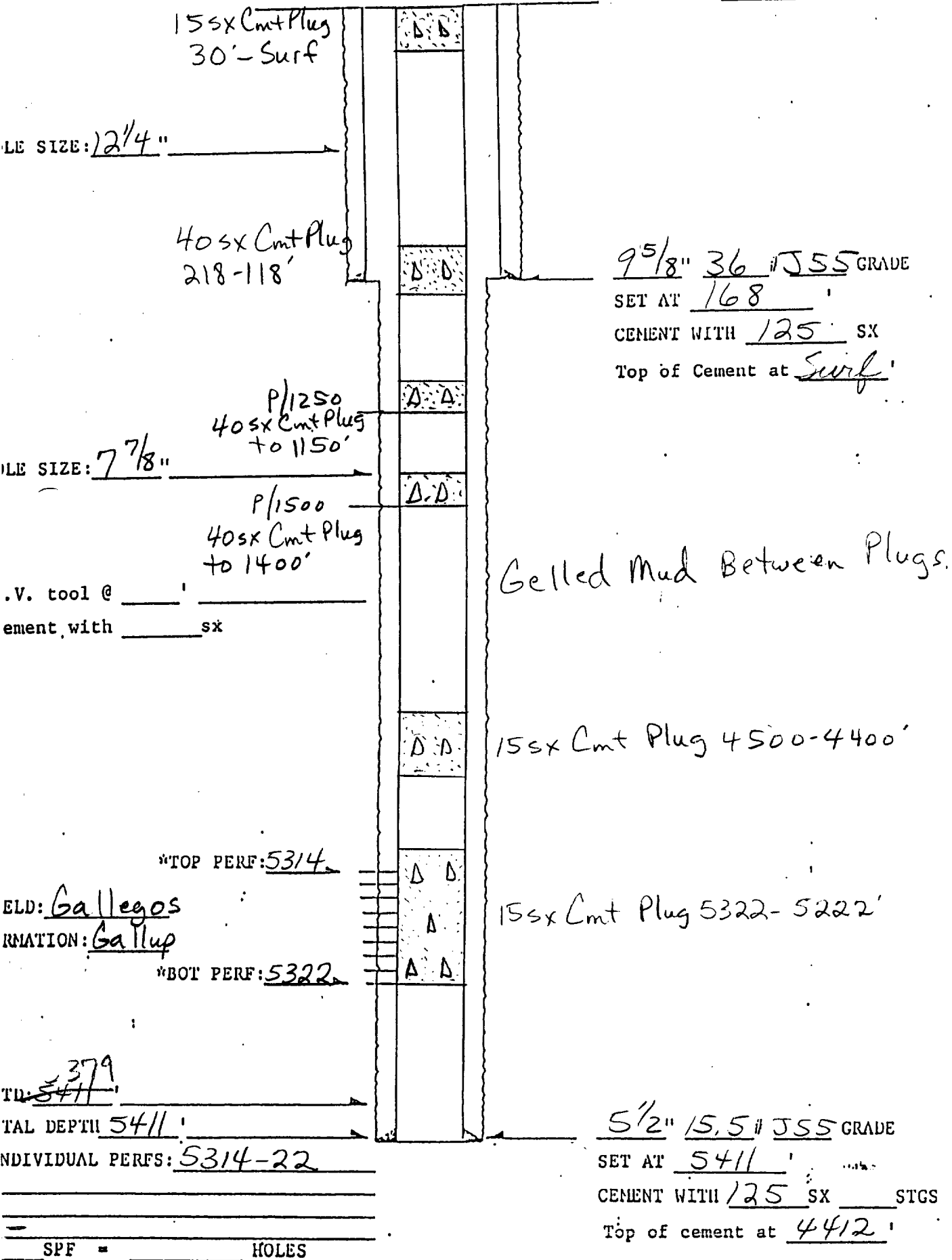


#61

WELLBORE DIAGRAM

K.B. ELEV.: 5792  
K.B. CORRECTION: 11  
G.L. ELEV.: 5781



WELL NAME: NW CHA CHA UNIT WELL NO.: 34-4

WELLBORE DIAGRAM AS OF DATE: 2/11/91

DATE: NM COUNTY: San Juan BLOCK: A SECTION: 34

TOWNSHIP: 29N RANGE: 14W LEGAL: 560 N 560 E

OPERATOR: SOI WORKING INTEREST: ROYALTY INTEREST:

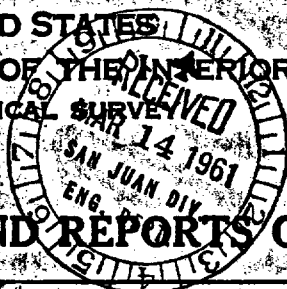
COMPLETION DATE: 4/61 CURRENT STATUS: (PMP) (FLOW) (INJ) (T/A) (SI) PJA

(SUBMIT IN TRIPLICATE)

Indian Agency **Navajo Tribal Council**


**APPROVAL** UNITED STATES DEPARTMENT OF THE INTERIOR

MAR 9 1961  
P. J. McGRATH  
DISTRICT ENGINEER



Allottee

Lease No. **14-20-603-2168**

**SUNDRY NOTICES AND REPORTS ON WELLS**

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

**RECEIVED**  
MAR 10 1961

VERBAL APPROVAL OBTAINED MARCH 8, 1961.

U. S. GEOLOGICAL SURVEY  
FARMINGTON, NEW MEXICO

March 9, 1961

**Ojo Amarillo**

Well No. **7** is located **560** ft. from **N** line and **560** ft. from **E** line of sec. **34**

**NE/4 NE/4 Section 34** **29N** **14W** **NMPM**  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
**Cha Cha Gallup** **San Juan** **New Mexico**  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is **5791** ft.

**DETAILS OF WORK**

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

It is intended to drill a well through the Lower Gallup Formation using rotary tools and mud circulation. Possible productive intervals will be perforated and sandoil fractured.

Estimated Total Depth **5420'**

Casing Program:

9-5/8" at 160' with 150 sacks cement circulated to surface.

5-1/2" at 5420' with 200 sacks cement.

The E/2 NE/4 of Section 34 is dedicated to this well.

E/2 NE/4 Section 34 Navajo Tribal Council 14-20-603-2168

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company **El Paso Natural Gas Products Company**

Address **Post Office Box 1560**  
**Farmington, New Mexico**

ORIGINAL SIGNED BY: JOSEPH E. KREGER

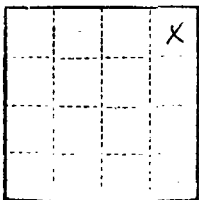
By \_\_\_\_\_

Title **Petroleum Engineer**

(SUBMIT IN TRIPLICATE)

Land Office Navajo Tribal CouncilLease No. 14-20-603-2168

Unit \_\_\_\_\_



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	<input checked="" type="checkbox"/>
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

3/13

1961

000 Amarillo Well No. 7 is located 560 ft. from N line and 560 ft. from E line of sec. 34

NE 1/4 NW 1/4 34  
(1/4 Sec. and Sec. No.)

29 N  
(Twp.)

14 W  
(Range)

NMPM  
(Meridian)

Cha Cha  
(Field)

Gallup

San Juan  
(County or Subdivision)

(New Mexico) (Wyoming) (Utah)  
(State or Territory)

(Colorado) (Arizona)

The elevation of the derrick floor above sea level is 5791 ft.

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Spud Date: 3-11-61 1961. 3-11-, 1961 TD 169 ft.

Ran 5 joints 9 5/8", 36 #, J-55 Csg. (153.35)

set at 167.83 ft with 125 sacks regular cement, 2 % CaCl<sub>2</sub> circulated to surface.

Held 500#/30 Minutes.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company El Paso Natural Gas Products Company

Address Post Office Box 1565

Farmington, New Mexico

By Van E. Dykes

Title Petroleum Engineer

(SUBMIT IN TRIPLICATE)

Indian Agency **Navajo Tribal Council**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Allottee \_\_\_\_\_  
Lease No. **14-20-603-2163**

			<b>X</b>

**SUNDRY NOTICES AND REPORTS ON WELLS**

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	<b>X</b>
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

**RECEIVED**  
MAR 14 1961

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

U. S. GEOLOGICAL SURVEY  
FARMINGTON, NEW MEXICO

March 13, 1961

**Ojo Amarillo**

Well No. **7** is located **360** ft. from **[N]** line and **560** ft. from **[E]** line of sec. **34**

**NE/4 NE/4 Section 34**

**29N**

**14W**

**NMPM**

(1/4 Sec. and Sec. No.)

(Twp.)

(Range)

(Meridian)

**Cha Cha Gallup**

**San Juan**

**New Mexico**

(Field)

(County or Subdivision)

(State or Territory)

The elevation of the derrick floor above sea level is **5791** ft.

**DETAILS OF WORK**

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Spud Date: **March 11, 1961.**

**March 11, 1961: Total Depth 169'.**

**Ran 5 joints, 9-5/8", 86.00#, J-55 Csg. (153.35') set at 167.83' with 125 sacks regular cement, 2% CaCl<sub>2</sub> circulated to surface.**

**Held 500#/30 Minutes.**

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company **El Paso Natural Gas Products Company**

Address **Post Office Box 1560**  
**Farmington, New Mexico**

**ORIGINAL SIGNED BY: VAN E. DYKES**  
By \_\_\_\_\_

Title **Petroleum Engineer**

(SUBMIT IN TRIPLICATE)

Indian Agency **Navajo Tribal**  
**Council**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Allottee \_\_\_\_\_  
Lease No. **14-20-603-2168**

			<b>X</b>

**SUNDRY NOTICES AND REPORTS ON WELLS**

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	<b>X</b>
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

U. S. GEOLOGICAL SURVEY  
FARMINGTON, NEW MEXICO

March 27, 19 61

**Ojo Amarillo**

Well No. **7** is located **360** ft. from **N** line and **360** ft. from **E** line of sec. **34**  
**NE/4 NE/4 Section 34** **29N** **14W** **NMPM**  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
**Cha Cha Gallup** **San Juan** **New Mexico**  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is **5791** ft.

**DETAILS OF WORK**

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudlogging jobs, cementing points, and all other important proposed work)

**March 22, 1961 Total Depth 5412'.**

**Ran 173 joints, 5-1/2", 15.50#, J-55 Casing ( 5396.36' ) set at 5410.71' with 63 sacks regular cement, 62 sacks Pozmix, 4% Gel, 1/4# Flocele/sack. Held 1000#/30 Minutes. Top of cement by temperature survey at 4412'.**

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company **El Paso Natural Gas Products Company**

Address **Post Office Box 1560**  
**Farmington, New Mexico**

ORIGINAL SIGNED BY: **VAN E. DYKES**

By \_\_\_\_\_

Title **Petroleum Engineer**

ORIGINAL SIGNED BY: **VAN E. DYKES**

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo Tribal  
**Council**

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

Allottee 14-20-603-2168  
Lease No. \_\_\_\_\_

			<b>X</b>

**SUNDRY NOTICES AND REPORTS ON WELLS** **RECEIVED**

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	MAR 27 1961 S. GEOLOGICAL SURVEY FARMINGTON, NEW MEXICO
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL	SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL	<b>Sandoil Frac.</b>	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

March 27, 1961

**Ojo Amarillo**

Well No. 7 is located 360 ft. from N line and 560 ft. from E line of sec. 34

**NE/4 NE/4 Section 34**      **29N**      **14W**      **NMPM**  
(1/4 Sec. and Sec. No.)      (Twp.)      (Range)      (Meridian)

**Cha Cha Gallup**      **San Juan**      **New Mexico**  
(Field)      (County or Subdivision)      (State or Territory)

The elevation of the derrick floor above sea level is 5791 ft.

**DETAILS OF WORK**

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

**March 26, 1961 Total Depth 5411'. Clean Out Total Depth 5379'.**  
**Sandoil fractured Lower Gallup perforated intervals 5314'-5322' (perforated 4 shots/foot) with 73,206 gals. lease crude and 60,000# sand. Breakdown pressure 2300 psi; maximum treating pressure 2700 psi; average treating pressure 2300 psi. Injection Rate: 41.1 bbls./min. Flush with 5334 gals. lease crude.**

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company El Paso Natural Gas Products Company

Address Post Office Box 1560  
Farmington, New Mexico

**ORIGINAL SIGNED BY: JOSEPH E. KREGER**

By \_\_\_\_\_

Title Petroleum Engineer

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-2168

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

NW Cha Cha

8. FARM OR LEASE NAME

NW Cha Cha Unit

9. WELL NO.

41-34

10. FIELD AND POOL, OR WILDCAT

Cha Cha Gallup

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

Sec. 34-29N-14W NMPM

12. COUNTY OR PARISH 13. STATE

San Juan

N. M.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Humble Oil & Refining Company

3. ADDRESS OF OPERATOR

P. O. Box 120, Denver, Colorado 80201

Jt. Operations

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

NE NE (560' FNL, 560' FEL) Sec. 34

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5792'KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

10-12-72 Spot 15 sack cement plug 5322-5222

Spot 15 sack cement plug 4500-4400

10-14-72 Shot casing @ 1500'. 40 sxs cement plug inside and outside casing from 1400' to 1500'.

Shot casing @1250'. Spot 40 sxs cement plug from 1250 to 1150.

Shot casing off @ 1080. Pulled casing.

10-16-72 Spot 40 sack cement plug from 218' to 118'.

Spot 15 sace cement plug from 30' to 0'.

Installed regulation dry hole marker and cleaned location for inspection.

Intervals between plugs filled with gelled mud.

CC: 2-New Mexico Oil Conservation Commission

1-Minerals Supervisor-Navajo Tribe

1-Midland

18. I hereby certify that the foregoing is true and correct

SIGNED

J. Roy Dorrrough

TITLE

District Superintendent

DATE

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY: